PHYSICS LETTERS B

Abstracted/Indexed in: Current Contents: Physical, Chemical & Earth Sciences/INSPEC/Physics Briefs

Volume 384, numbers 1,2,3,4 **19 September 1996**

Contents

Instructions to authors v

Nuclei

Vibrations of slabs and cylindrical nuclei
F.V. De Blasio and G. Lazzari 1

Scaling behavior in soliton models
M. Harada, F. Sannino, J. Schechter and H. Weigel 5

Pion and photon induced reactions on the nucleon in a unitary model
O. Scholten, A.Yu. Korchin, V. Pascalutsa and D. Van Neck 13

Projected quasi-particle calculations of ^{119}Sn, ^{121}Sn, and ^{123}Sn using realistic interactions
L. Losano, H. Dias and T.T.S. Kuo 20

Excited states in ^{161,162}Yb seen as mass asymmetric nuclear molecules
I. Sitnikova, Th. Arctædius and Chr. Bargholtz 25

Two-phonon giant dipole resonance in ^{208}Pb
LAND Collaboration 30

Compton scattering by the proton through $\theta_{cms} = 75°$ in the Δ-resonance region
J. Peise et al. 37

On the two first excited $K = 0$ bands in ^{238}U and ^{240}Pu
J.M. Hoogduin et al. 43

Particles and fields

Short distance repulsive gravity as a consequence of non-trivial PPN parameters β and γ
S. Kalyana Rama and S. Ghosh 50

Multidimensional extremal dilatonic black holes in string-like model with cosmological term
V.D. Ivashchuk and V.N. Melnikov 58

Rotating dyonic black holes in heterotic string theory
D.P. Jatkar, S. Mukherji and S. Panda 63

Stability of Zitterbewegung of a rigid particle
B.P. Kosyakov and V.V. Nesterenko 70

Phase transition in flucutuating branched geometry
P. Bialas and Z. Burda 75

IR dynamics on branes and space-time geometry
N. Seiberg 81

Dyonic p-branes from self-dual $(p+1)$-branes
M.B. Green, N.D. Lambert, G. Papadopoulos and P.K. Townsend 86

Virtual D-branes
D. Berenstein, R. Corrado, W. Fischler, S. Paban and M. Rozali 93

Topological inflation in dual superstring models
M.C. Bento and O. Bertolami 98

The generalized dilaton supersymmetry breaking scenario
J.A. Casas 103

Supersymmetric Wilson loops, superstring-like observables, and the natural coupling of superstrings to supersymmetric gauge theories
M. Awada and F. Mansouri 111

Towards a viable grand unified model with $M_G \sim M_{string}$ and $M_I \sim 10^{12}$ GeV
N.G. Deshpande, B. Dutta and E. Keith 116

Neutrino masses and mixing in supersymmetric models without R parity
F.M. Borzumati, Y. Grossman, E. Nardi and Y. Nir 123

Real forms of non-abelian Toda theories and their W-algebras
J.M. Evans and J.O. Madsen 131

The problems of unification-mismatch and low α_3: A solution with light vector-like matter
K.S. Babu and J.C. Pati 140

(Continued inside)

0370-2693(19960919)384:1-4;1-2

PHYSICS LETTERS B

Volume 384, numbers 1,2,3,4 19 September 1996

Contents

(Continued from page 4 of cover)

New signatures for a light stop at LEP2 in SUSY models with spontaneously broken *R*-parity
A. Bartl, W. Porod, M.A. García-Jareño, M.B. Magro, J.W.F. Valle and W. Majerotto 151

Constraints on *R*-parity violating interactions from $\mu \to e\gamma$
M. Chaichian and K. Huitu 157

Galactic diffusion and the antiproton signal of supersymmetric dark matter
P. Chardonnet, G. Mignola, P. Salati and R. Taillet 161

CP violating decays in leptogenesis scenarios
L. Covi, E. Roulet and F. Vissani 169

Dynamical breaking of CPT symmetry in defect networks and baryogenesis
T. Prokopec, R. Brandenberger, A.C. Davis and M. Trodden 175

The phase transition of the two Higgs extension of the standard model
V. Zarikas 180

Self-dual gauged CP^N models
P.K. Ghosh 185

Instantons or monopoles? Dyons
V. Bornyakov and G. Schierholz 190

Action principle for the classical dual electrodynamics
P.C.R. Cardoso de Mello, S. Carneiro and M.C. Nemes 197

Lattice bosonization
M. Kudinov and P. Orland 201

Baby Skyrmion strings
T. Gisiger and M.B. Paranjape 207

Nambu-Goto string without tachyons between a heavy and a light quark – real interquark potential at all distances
H. Kleinert, G. Lambiase and V.V. Nesterenko 213

Formulations of spin 1 resonances in the chiral Lagrangian
M. Tanabashi 218

Spin 3/2 interacting fields and heavy baryon chiral perturbation theory
M. Napsuciale and J.L. Lucio M. 227

Double bubble corrections to heavy quark production
K.G. Chetyrkin, A.H. Hoang, J.H. Kühn, M. Steinhauser and T. Teubner 233

Heavy meson pair production in polarized e^+e^- annihilation
F. Amiri and C.-R. Ji 241

A new variant of symmetry breaking for quark mass matrices
H. Lehmann, C. Newton and T.T. Wu 249

Dilepton and photon emission rates from a hadronic gas
J.V. Steele, H. Yamagishi and I. Zahed 255

Strong couplings from QCD sum rules
N.F. Nasrallah 263

Asymptotic limits and sum rules for the quark propagator
R. Oehme and W. Xu 269

The effect of the masses of the τ decay products on the transverse spin correlation in $\tau^+\tau^-$ production at the Z pole
F. Sánchez 277

Remarks on a technique of measuring CP phase α
N.G. Deshpande, X.-G. He and S. Oh 283

No Λ oscillations
J. Lowe, B. Bassalleck, H. Burkhardt, A. Rusek, G.J. Stephenson Jr. and T. Goldman 288

(Continued on preceding page)

PHYSICS LETTERS B

Volume 384, numbers 1,2,3,4 **19 September 1996**

Contents

(Continued from following page)

Can one probe the structure function of the pomeron?
J. Ellis and G.G. Ross 293

Associated jet production at HERA
J. Bartels, V. Del Duca, A. De Roeck, D. Graudenz and M. Wüsthoff 300

The primary cosmic radiation nuclei spectra cutoff in the energy range 10^{15}–10^{16} eV – a possible signature of dark matter
T. Barnaveli, T. Barnaveli, N. Eristavi, I. Khaldeeva and Y. Werbetsky 307

Preliminary results on the performance of a TeO_2 thermal detector in a serach for direct interactions of WIMPs
A. Alessandrello et al. 316

Observation of multiple hard photon final states at $\sqrt{s}$ = 130–140 GeV at LEP
L3 Collaboration 323

A study of single and multi photon production in e^+e^- collisions at centre-of-mass energies of 130 and 136 GeV
ALEPH Collaboration 333

Prompt J/ψ production in hadronic Z^0 decays
OPAL Collaboration 343

Quark and gluon jet properties in symmetric three-jet events
ALEPH Collaboration 353

Search for *CP* violation in the decay $Z \to b\bar{b}g$
ALEPH Collaboration 365

A first measurement of the $\Lambda\bar{\Lambda}$ and $\Lambda\Lambda$ ($\bar{\Lambda}\bar{\Lambda}$) spin compositions in hadronic Z^0 decays
OPAL Collaboration 377

Observation of events with an energetic forward neutron in deep inelastic scattering at HERA
ZEUS Collaboration 388

Dijet angular distributions in direct and resolved photoproduction at HERA
ZEUS Collaboration 401

Measurement of the b forward-backward asymmetry and mixing using high-$p_\perp$ leptons
ALEPH Collaboration 414

Mass limit for the standard model Higgs boson with the full LEP I ALEPH data sample
ALEPH Collaboration 427

Search for heavy lepton pair production in e^+e^- collisions at centre-of-mass energies of 130 and 136 GeV
ALEPH Collaboration 439

Strange b baryon production and lifetime in Z decays
ALEPH Collaboration 449

Search for charginos and neutralinos with R-parity violation at $\sqrt{s}$ = 130 and 136 GeV
ALEPH Collaboration 461

Observation of charmless hadronic B decays
ALEPH Collaboration 471

Measurement of $D^{*\pm}$ production in two-photon processes at TRISTAN
AMY Collaboration 481

Errata

Baryogenesis through *CP*-violation in the mass matrix [Phys. Lett. B 345 (1995) 248]
M. Flanz, E.A. Paschos and U. Sarkar 487

Higher-order radiative corrections to low-angle Bhabha scattering: the YFS Monte Carlo approach [Phys. Lett. B 353 (1995) 362]
S. Jadach, E. Richter-Wąs, B.F.L. Ward and Z. Wąs 488

Distinctive signals of spontaneous R-parity breaking at LEP-II [Phys. Lett. B 378 (1995) 342]
R. Adhikari and B. Mukhopadhyaya 492

Cumulative author index to volumes 381–384 493